



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/498,204	02/04/2000	Martin J. Feuerstein	47586-P019CP1-09901497	8471
29053	7590	03/19/2004	EXAMINER	
DALLAS OFFICE OF FULBRIGHT & JAWORSKI L.L.P. 2200 ROSS AVENUE SUITE 2800 DALLAS, TX 75201-2784			FERRIS, DERRICK W	
		ART UNIT	PAPER NUMBER	
		2663		

DATE MAILED: 03/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/498,204	FEUERSTEIN ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Derrick W. Ferris	2663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 17 February 2004.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-45 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-45 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 04 February 2000 is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____.                                   |

## DETAILED ACTION

### *Response to Amendment*

1. **Claims 1-45** as originally filed are still in consideration for this application.
2. Examiner withdraws the obviousness rejection to *Searle* in view of *Mahmoudi* and *Tsoulos*; and *Searle* in view of *Mahmoudi* and *Tsoulos* in further view of *Dent* for Office action filed 10/02/03. In response to applicant's remarks filed 02/17/04, the rejections are withdrawn and replaced with a simplified rejection that places emphasis on adaptive or multi-beam antennas for CDMA with respect to switching based on CDMA channels. Examiner thanks applicant for placing emphasis on certain limitations in the claims. Hence below please find a new rejection.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. **Claims 1-45** are rejected under 35 U.S.C. 102(b) as being anticipated by WO 96/37974 to *Nokia*.

As to **claim 1**, *Nokia* discloses a method for steering an antenna beam in a base station. In particular, similar to applicant, *Nokia* discloses an invention for obtaining interference information in the downlink direction (e.g., see page 15, lines 27-33). Specifically, *Nokia* discloses a channel element, which performs signal processing as well as controls the transmitted signal (e.g., see page 18, line 33 – page 19, line 8). *Nokia* provides two embodiments for transmitting CDMA channels using adaptive antennas as

illustrated in figure 5 for embodiment #1 and figure 7 for embodiment #2. The focus of the rejection centers around the second embodiment although examiner notes both embodiments read on the claims. With respect to the claims, shown in figure 7 is an antenna having a plurality of transmitted signals which can be manipulated based on the received signals (see e.g., page 37, lines 16-34). See blocks 764,766,768 with respect to means for splitting each of said plurality of modulated transmitted outputs into signal components (also see figure 8). The independent switching means assigned to a particular channel are shown as the channel elements 738, 740, and 742 (see also figure 8). Finally, with respect to adaptively altering an attribute of the signals, see e.g., page 38, lines 1-19.

As to **claim 2**, see page 1, line 20.

As to **claims 3-4**, see page 7, line 28-29 and pages 19, 38.

As to **claims 5-6**, see 770 in figure 7.

As to **claims 7-10**, see page 7, line 28-29 and pages 19, 38.

As to **claim 11**, see A/D and D/A in figure 7.

As to **claim 12**, see TX1-TXL in figure 7, e.g., see page 35, lines 17-35 in reference to page 32, line 1-5.

As to **claims 13-15**, see e.g., page 37, lines 17-28 and figure 8.

As to **claims 16-17**, see e.g., page 12, line 1-6 and page 34, lines 12-21.

As to **claims 18-19**, see e.g., page 38.

As to **claim 20**, see combined rejections for claims 1 and 2.

As to **claim 21**, see similar rejection for claim 5.

As to **claim 22**, see similar rejection for claim 6.

As to **claim 23**, see e.g., baseband unit 510 in figure 5.

As to **claim 24**, see similar rejection for claim 3.

As to **claim 25**, see similar rejection for claim 4.

As to **claims 26-27**, see page 7, line 28-29 and pages 19, 38.

As to **claims 28-29**, see figure 7.

As to **claim 30**, see similar rejection for claim 7.

As to **claims 31**, see figure 7.

As to **claim 32**, see similar rejection for claim 13.

As to **claim 33**, see similar rejection for claim 12.

As to **claim 34**, see similar rejection for claim 11.

As to **claim 35**, see combined rejections for claims 1 and 2.

As to **claims 36 and 37**, see e.g., figure 8.

As to **claims 38 and 39**, see similar rejection for claim 13.

As to **claim 40**, see similar rejection for claim 3.

As to **claim 41**, see similar rejection for claim 4.

As to **claim 42**, see similar rejection for claim 7.

As to **claim 43**, see similar rejection for claim 8.

As to **claim 44**, see combined rejections for claims 33 and 34.

As to **claim 45**, see combined rejections for claims 11 and 12.

*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Derrick W. Ferris whose telephone number is (703) 305-4225. The examiner can normally be reached on M-F 9 A.M. - 4:30 P.M. E.S.T.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (703) 308-5340. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Derrick W. Ferris  
Examiner  
Art Unit 2663

DWF

  
CHI PHAM  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600 3/17/04